



NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

7500 GEOINT Drive
Springfield, Virginia 22150

NGA Public Affairs Office

For Immediate Release

March 1, 2012

On My Mind: NGA Transforms Global Navigation

Pathfinder Magazine
March/April 2012

America's foundational knowledge of deep oceans and distant lands rests on the often heroic achievements of mariners and aviators in service to science and security. Today's mariners and aviators have been able to build on this legacy with the benefit of transformative new technologies. GPS has replaced celestial observation and calculation. Digital information on portable devices is turning hard-copy air and sea almanacs into historical artifacts. The National Geospatial-Intelligence Agency (NGA) supports this transformation of global navigation in a number of ways—including enhanced sensing and imagery collection and analysis—using the latest GEOINT (geospatial intelligence). We're also developing creative new methods to deliver our products to air traffic controllers, pilots, port and harbor masters and ship captains working in the commercial, civil and defense sectors.

GEOINT for global navigation is a high-stakes endeavor. As the articles in this issue show, GEOINT products like digital aeronautical and nautical charts provide the literal map to a location and also give early warning of hazards to air and sea navigation, especially for unfamiliar areas. For example, vessels in the Arctic Ocean rely on Digital Nautical Charts to gain a common operating picture of the underwater terrain and vessel traffic. This knowledge reduces the chance of accidents, protecting the lives of the crews, the local environment and the global economy. GEOINT also plays a role in threat assessment and national deterrence. GEOINT anti-piracy applications, for example, increase awareness of high-risk sea channels, helping keep commercial and military vessels out of harm's way and improving law enforcement agencies' ability to bring pirates to justice.

For global navigation, our vision for online, on-demand GEOINT means moving more capabilities to the bridge and cockpit, working in partnership with our customers and the community of university, national laboratory and commercial developers of GEOINT products. Our partnerships with international allies also promote government-to-government cooperation on navigation safety. We engage in a number of cooperative initiatives with our Commonwealth partners, including the Allied Maritime Sub Group, which issues data standards and identifies opportunities for burden sharing on maritime safety areas of mutual interest. We also collaborate with our partners through international fora, such as the International Hydrographic Organization and International Civil Aviation Organization, to exchange vital information to ensure the safety of mariners and aviators around the world.

Delivering new applications in customizable distribution formats is one step toward achieving online, on-demand access to GEOINT. We are also creating open, online repositories to share geospatial information resources produced by our partners and customers. For example, our Global Maritime Photo Database is a one-stop shop for mariners to easily find photos of

significant landmarks and other aids to navigation; customers can even contribute their own data holdings to the photo database.

We have earned our customers' high expectations for reliability, accuracy and speed of delivery. NGA continues to meet and exceed those expectations. We will continue to find innovative ways to put the power of GEOINT in our customers' hands so that together we can always put safety first.

Letitia A. Long
Director